



18 HIGH STREET, MERTHYR TYDFIL

BAT SURVEY

ISSUE 1, VERSION B

SEPTEMBER 2020

Mr David Pittham

18 HIGH STREET, MERTHYR TYDFIL

Bat Survey Report

Document control

Issue	Author	Checked	Approved	Date
1	BE	HBD		17.09.20

Contents Amendment Record

This report has been issued and amended as follows:

Issue	Revision	Description	Approved by	Date
1	A	Minor amendments	BE	17.09.20
1	B	Minor amendments	BE	23.11.20

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EXECUTIVE SUMMARY

It is proposed to alter and refurbish 18 High Street, Merthyr Tydfil. As part of the proposals, the property is to be re-roofed and extended.

An initial bat inspection survey was undertaken in September 2020. The results indicated that the building is of low/negligible potential for roosting bats. A single emergence survey was undertaken on the building.

The surveys failed to identify any bats roosting within the property. The single survey was undertaken in September at a sub-optimal time of year for bat surveys, however due to the lack of bat activity at the site, the current warm weather conditions, the lack of evidence at the site, the lack of potential access features, the fact that the works will be undertaken between September and March, the fact that bats will be provided with access to the roof void (that they have currently) and all of the work will be completed before the start of bat season 2021, this is not thought to be an issue.

A European Protected Species Licence will not be required in this instance unless bats or evidence of bats are discovered during the works. To safeguard this unlikely eventuality, works to the roof will be carried out in accordance with a method statement and supervision by an experienced licensed bat ecologist.

No evidence of breeding birds was found on the exterior of the building.

1 INTRODUCTION

1.1 Background

BE ECOLOGICAL LTD was commissioned by Mr David Pittham to undertake an initial bat inspection survey and subsequent activity survey of in support of a planning application to refurbish, extend and alter 18 High Street, Merthyr Tydfil, South Wales.

This report includes the findings of the aforementioned bat activity surveys undertaken in the appropriate season.

The surveys were undertaken in line with the current guidance on standards for bat surveys (Bat Conservation Trust, 2016¹).

1.2 Site description

The property is situated on the main High Street of Merthyr Tydfil town centre, South Wales.

The property forms part of a terrace of houses and commercial buildings. The property is a stone rendered structure with a slate roof, the ridge of which generally runs from north east to south west.

There is a roof window on the north west elevation and a dormer window on the south eastern elevation.

The roof appears to be in good order and has been replaced in recent years. However, as the property is the subject of a heritage grant, the roof must be replaced with welsh slate.

Fascias are of timber and are tightly fitting. There is some ivy coverage to the rear of the property.

The property is situated in a wholly urban environment. There is an overgrown garden with patches of vegetation further afield. The connectivity surrounding the site appears to be moderate with patches of vegetation leading to the wider landscape.

¹ *Bat Surveys for Professional Ecologists - Good Practice Guidelines* (Collins, J (Ed). BCT, 2016)



Figure 1: Detailed view of the property (boxed red)



Figure 2: View of wider landscape surrounding the property (property arrowed red)

1.3 Proposed development

It is proposed to alter and refurbish 18 High Street, Merthyr Tydfil, South Wales. As part of the refurbishment the roof, timberwork and rainwater goods will be replaced. There will be a double storey extension to the rear, however this will tie in below eaves level.



2 LEGISLATION & POLICIES

2.1 Conservation of Habitats & Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended) provides safeguards for European Protected Species (those listed under Annex IV Habitats Directive). With regards to bats, this makes it an offence to:

- Deliberately (or recklessly in Scotland) capture, injure or kill a bat
- Deliberately (or recklessly in Scotland) disturb a bat in a way that would (significantly in Scotland) affect its ability to survive, breed or rear young (or hibernate or migrate in England, Wales and Northern Ireland) or (significantly in England, Wales and Scotland) affect the local distribution or abundance of the species.
- Damage or destroy a roost (this is an 'absolute' offence)
- Possess, control, transport, sell, exchange or offer for sale/exchange any live or dead bat or any part of a bat

2.2 Wildlife & Countryside Act 1981

The Wildlife & Countryside Act 1981 (as amended) is the legislation for England and Wales for nature conservation, making it an offence to:

- Intentionally or recklessly disturb a bat at a roost
- Intentionally or recklessly obstruct access to a roost

2.3 The Environment (Wales) Act 2016

The Environment (Wales) Act 2016 requires that all public authorities, when carrying out their functions in Wales, seek to "maintain and enhance biodiversity" where it is within the proper exercise of their functions. In doing so, public authorities must also seek to "promote the resilience of ecosystems". This ensures that biodiversity is an integral part of the decisions that public authorities take in relation to Wales. It also links biodiversity with the long term health and functioning of our ecosystems, therefore helping to align the biodiversity duty with the framework for sustainable natural resource management provided in the Act. In Wales, this legislation replaces and enhances the Natural Environment and Rural Communities Act (2006) which sought to raise the profile of biodiversity and to make sure that it is considered in all local authority decisions by ensuring that "Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.". Other elements of NERC 2006 may still apply.

3 METHODOLOGY

3.1 Data Search

The South East Wales Biodiversity Records Centre (SEWBRc) were formerly requested to supply a Bat and Roof-nesting Birds (BARB) survey for the site (0201-358). The survey to provide; bat records within a 2km buffer, roof nesting birds within 150m buffer plus a list of all Special Areas of Conservation (SAC) and sites of Special of Special Scientific Interest (SSSI) designated for bat species within a 10km site buffer.

3.2 Survey Objectives

- To carry out an initial bat inspection survey along with the recommended activity surveys
- To present the above details and if necessary recommendations for mitigation, future research and compensation within this report.
- To carry out a scoping survey for breeding birds

3.3 Survey Summary

The bat survey comprised of three parts:

- Part 1- Initial bat inspection survey
- Part 2- A data search
- Part 3- A single activity survey

3.4 Surveyor Information

The survey was run and overseen by Beth Evans. Beth is the owner of BE ECOLOGICAL LTD and has a postgraduate degree in Environmental Biology: Conservation & Resource Management, specialising in British bats. Beth has six years' experience of ecological surveys, both in a small scale and large multi-disciplinary context. Beth also holds Natural Resources Wales and Natural England bat licences to disturb and handle bats.

The scoping survey was undertaken by Stephen Shutt. The activity surveys were undertaken by Stephen Shutt who was assisted by Sylvia Sanyalou. Stephen is an experienced licensed ecologist and Sylvia has undertaken a number of surveys with BE Ecological Ltd and is currently training to be an ecologist.

3.5 Internal & External Inspection

An initial inspection survey was carried out on 4th September 2020 to search all buildings, both externally to identify potential bat roosting areas and signs of bat use including; live bats, dead bats, droppings, urine staining, grease marks and discarded prey items. The buildings and all areas/items of interest were recorded and photographed. Extension ladders/steps were used to safely access roof areas and fascia boards etc; where no safe access was available the survey was conducted using, close focus binoculars and/or a high powered lamp.

3.6 Activity Surveys (emergence/re-entry surveys)

Building 'emergence' and 're-entry' surveys were carried out on the following dates, times and weather conditions. Climatic conditions including rain, wind, temperature and cloud cover were recorded for each survey using a hand held Kestrel 4500 weather station.

3.6.1 Survey 1- 6th September 2020

A dusk survey was carried out on 4th September using two surveyors ,positioned in such a way that as much of the building was visible to surveyors as possible. Surveyors were equipped with Batlogger M detectors.

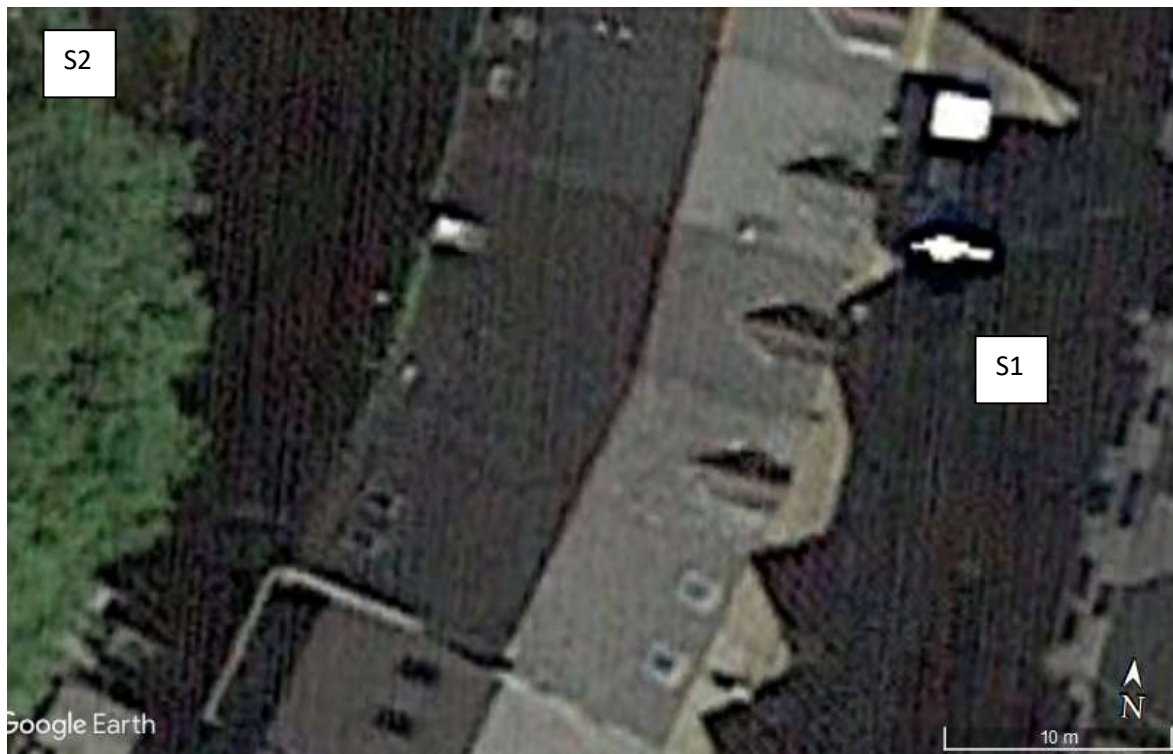


Figure 3: Approximate surveyor locations

3.7 Survey limitations

Any survey for bat species can only be a series of snapshots in time. Bats are highly mobile, long lived creatures (capable of living up to 30 years, sometimes longer) with complex social structures and utilising multiple roost sites within a year. The implications of this are that surveys and surveyors have to make informed assumptions based on observations, recorded data, local information and a detailed knowledge of the species.

The single survey was undertaken in September at a sub-optimal time of year for bat surveys, however due to the lack of bat activity at the site, the current warm weather conditions, the lack of evidence at the site, the fact that the works will be undertaken between September and March, the fact that bats will be provided with access to the roof void (that they have currently) and all of the work will be completed before the start of bat season 2021, this is not thought to be an issue.

4 RESULTS

4.1 Data Search

The site is not within 10km of neither an SSSI or SAC that has been designated for bat species within Wales.

A total of 99 records were returned within the data search. The closest bat record appears to be of pipistrelle bats and a noctule bat commuting approximately 109m from the site. The closest roosting record appears to be of a pipistrelle roost 189m from the site. Other species within the data search include pipistrelle, noctule, brown long-eared, myotis, and records referred to a Chiroptera species.

There is a lesser horseshoe bat roost record from 2019, c.65m away from the site to the NW (in the former YMCA building). The site is also a roost for brown long-eared bat and pipistrelle species.

There is also an unconfirmed SEWBReC record for a lesser horseshoe bat roost, c.215m to the SE of the site from 2011: 'Roost in basement. Lesser Horseshoe type droppings found

10 records of birds were returned within the search. The closest of which refer to lesser black backed gull, blue tit and herring gull, all of which were in 455m of the site.

4.2 Inspection survey

4.2.1 External survey results

The survey carried out by BE Ecological Ltd revealed no droppings or evidence of bats on the exterior of the building, however, access and roosting potential for bats was identified in the form of:

- Small area of lifted lead flashing on a dormer window
- Possibly some access on the ridge of the dormer, however, they do appear to be relatively tight fitting.
- Possibly gaps at fascia level to the rear of the property (obscured by ivy).

As such, the property was categorised as being of low potential for roosting bats and further emergence/re-entry surveys were recommended.

There is a vast amount of ivy cover to the rear of the building. However, the ivy is thin stemmed and young and does not appear to be large enough to support the thermal properties that roosting would require.

No birds were seen during the survey.

4.2.2 Internal survey results

There is a roof void above the property. The roof void spans the full width of the building and has an approximate joist to ridge height of approximately 1.5m. The roof void is situated above the dormer window. The dormer window provides access to the first floor.

Internally, the walls appear to be of stone. The only access into the void appears to be from the neighbouring terraces, above the wall plates. There is some torn felt but no obvious light ingress'. The roof is lined with bitumen felt.

No bats or evidence of bats was found in this location. Lots of evidence of rats was found in this location, however, the rat droppings appear to be old. It is thought likely that rats are entering the void either via wall cavities or over the wall plates from the adjoining properties.

4.3 Activity surveys

The surveys were undertaken as per the table below:

4.4 Survey Schedule and Weather Conditions

Table 1: Schedule and weather conditions

Visit	Date (sunrise) (sunset)	Start End	Time	Temp C	Wind	Cloud Cover	Notes
Survey 1 04.09.20	19:50	Start	19:25	16	Low	65%	Dry evening, insects flying
		End	21:50	14	Low	45%	

4.5 Activity Survey Results

4.5.1 Survey 1- 6th September 2020

The first bat heard was that of a common pipistrelle at approximately 15 minutes post sunrise. The bat was observed commuting back and forth the vegetation to the rear of the property. Activity was extremely limited at the front of the property.

The surveyor to the rear of the property was stood next to a culvert that contains the River Taff as viewing access of the roof was difficult from the courtyard to the rear due to the buildings height. Activity here was extremely high with numerous common and soprano pipistrelles foraging along the water for the duration of the survey.

No other bat calls were heard and no bats emerged from or took any interest in the property on this date.

4.6 Identified Roosts

4.6.1 Survey 1

No bats emerged from the building on this date.

4.7 Conclusion

Overall levels of bat activity at the site were extremely low at the front of the site, however, due to the surveyors position at the rear, bat activity was high. Only two species were heard on site, common and soprano pipistrelle.

The building appears to be well sealed with the roof replaced in recent years. The only potential gaps were on the dormer window at the front of the building and this potential was debatable as to whether bats could access at these locations or not.

Based on the current evidence, it is considered that mitigation and an NRW development licence will not be required unless bats or evidence of bats are encountered during the works.

Due to the property being a terraced building and adjoined to various properties, during the surveys, buildings either side were also watched, with no bat activity and no emergence noted.

As such it is considered that the works can proceed providing they are undertaken in line with a method statement and ecological supervision.

4.8 Breeding Birds

No birds were noted within the property.

5 INTERPRETATION & IMPACT ASSESSMENT

5.1 Active Season Usage

It is considered that the property is not a bat roost.

5.2 Hibernation Season Usage

It is unlikely that bats will use the property for hibernation purposes due to a lack of access points and evidence to suggest so.

5.3 Breeding Birds

No birds nests were noted throughout the course of the survey.

5.4 Ecological Impacts of development

The impacts of the development have been assessed using the current information of the proposed works. Should any changes be made to the proposed works, the assessment will need to be reviewed and amended as necessary.

It is considered unlikely that the property is a bat roost and no evidence of nesting birds was found throughout the property. As such bats are unlikely to be affected by the proposed development.

6 ENHANCEMENT

6.1 Bats

Two modified ridge tiles will be installed on the property to allow bats access to the roof void at these locations. A small section of the ridge tile will be cut out in order to facilitate this. This will be overseen by the supervising ecologist.

6.2 Birds

A Schwegler 1SP Sparrow Terrace or the following <https://www.nhbs.com/sparrow-terrace-nest-box> will be attached to the rear elevation of the property.

The installation of enhancements will be confirmed in writing to the Local Planning Authority ecologist.

7 RECOMMENDATIONS

7.1.1 Timing

It is considered that the building is not a bat roost, as such, the work can be undertaken at any time of year. However, as there is a time constraint associated with funding for the work, all of the works will be complete by March 2021.

The county ecologists view is that the winter needs to be avoided and works should be undertaken outside of this period. Any works undertaken during December and January would be at the clients' own risk.

7.1.2 Timber/roofing materials

As bats will have access to the roof void, all timber must be treated with bat friendly preservatives and the roof must be lined with Type 1 Bitumen Felt.

7.1.3 Lighting

Potential access points and bat boxes will not be directly illuminated. All external lighting will face downwards and be set on timers to ensure that bats can use the area should they wish. – In addition to this, any onsite lighting will conform to the following guidelines:

<https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>

All lighting to the rear of the property will be recessed to reduce the impacts on foraging bats.

7.1.4 Bat Licensing

A European Protected Species Licence obtained from Natural Resources Wales will not be required before any works commence. If at any point bats or evidence of bat is found, all works must cease and NRW consulted. Further surveys and/or a licence may be required prior to works recommencing

7.1.5 Supervision

Supervision for the removal of the slates, timber, uPVC, rainwater goods and installation of the bat features will be required.

8 METHOD STATEMENT

1. A suitably licenced and experienced ecologist will be on site/call for the duration of the works.
2. Before any work begins on site, a briefing for contractors and other site-staff 'toolbox talk' will be given by an ecologist. The briefing will cover the issues in respect of protected species they may encounter on site, where they might find them, methods of working, and what they need to know to avoid committing an offence. Every briefing attendee will be provided with a copy of a Method Statement and the contact details of an ecologist and Natural Resources Wales.
3. All suitable bat roosting features will need to be removed by hand (slates/tiles/timber work/rainwater goods) and inspected by the onsite bat ecologist.
4. The tiles will also need to be removed manually, one at a time, with the bed and underside inspected for bats/sign of bats by the onsite ecologist before moving onto the next.
5. Only when the onsite bat ecologist is happy that there is no further potential for bats, may he/she leave and the works continue with no supervision. A licensed bat ecologist will be on call for the remainder of the works. In the unlikely event that bats are found during a period that the licensed bat ecologist is not present on site, all works must cease and the licenced bat ecologist engaged.
6. If bats or their signs are found, a EPS licence may be required before works can legally resume.

9 REFERENCES

Bat Conservation Trust. (2016) *Bat Surveys - Good Practice Guidelines*. Bat Conservation Trust, London.

Mitchell-Jones, A.J. & McLeish, A.P. (2004) *The bat workers' manual (3rd Edition)*. Joint Nature Conservation Committee.

Mitchell-Jones, A.J. (2004). *Bat Mitigation Guidelines*. Natural England

The Conservation of Habitats and Species Regulations 2017 (as amended) (HMSO).

The Natural Environment and Rural Communities Act (2006) (as amended) (HMSO).

The Wildlife and Countryside Act 1981 (as amended) (HMSO).

APPENDIX A- SITE PHOTOGRAPHS

Plate 1- Photograph of roof void



Plate 2- photograph of rat droppings



Plate 3- Photograph of front elevation



Plate 4- photograph of dormer ridges



Plate 5- photograph of lifted lead



Plate 6- photograph of rear roof



Plate 7- photograph of ivy



Appendix B- Drawings showing enhancements (modified ridge tile arrowed red) (sparrow terrace arrowed yellow)



Appendix C- Bat flight lines (all bats followed the river back and forth.

